

Focus questions for the article, “Assessment in High Schools at the Start of the 21st Century.”

Read through the questions below. Look for the answers to these questions as you read the article. You don’t have to turn anything in. Just come prepared to discuss your responses.

1. According to the article, what is the purpose of classroom-based assessment?
 2. What is one of the shortcomings of the “Teach, test, and hope for the best” approach to teaching?
 3. How does the acceptance of a constructivist view of learning alter a teacher’s understanding of assessment?
 4. Describe a situation in your student teaching setting in which you might use *informal assessment*.
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Assessment in High School at the Start of the 21st Century ¹

Assessment in the context of education can be defined in terms of both process and purpose. The process of educational assessment is that of gathering evidence and making inferences from that evidence in order to address a variety of needs. Different needs come from different stakeholders in education. Students, for example, need to know how they are progressing and what to do next as they build their understanding of how to write a persuasive essay. Teachers need to know whether a set of lessons on the relationship between percents and fractions was successful. Parents need feedback on how their child is doing academically in the difficult transition from middle to high school. Principals, district administrators, legislators and the citizenry in general may all have various reasons to engage in or make use of the results of educational assessment. Accordingly, educational assessment can take many forms. The primary concern in this discussion is to address classroom-based assessment in the high school.

The purpose of assessment in this context is to find out what students know, what they understand, what they can do, and what are their attitudes and inclinations with regard to an educational objective. Teachers do not have direct access to these data. They cannot be measured directly the way we measure the volume of liquid in a vessel or the money in a bank account. Instead, teachers must observe students’ actions and deduce where students are in the journey toward a desired objective. The purpose of educational assessment, then, is to use external indicators to make inferences about an internal state.

Assessment must be distinguished from evaluation. Consistent with the general statement made above, classroom-based assessment is defined as the process of gathering ²evidence about a student’s knowledge of, ability to use, and disposition toward the area under study, and of making inferences from that evidence for a variety of purposes. Evaluation is defined as the process of determining the worth of, or assigning a value to,

¹ Roddy, M. (2005). Assessment in High School at the Start of the 21st Century. in *Encyclopedia of Education and Human Development*, eds. S.J. Farenga and D. Ness. London, M.E. Sharpe.

something on the basis of careful examination and judgment. Evaluation, therefore, is one of the uses of assessment information.

In current and ongoing efforts to reform education a good deal of attention is given to the role of classroom-based assessment. This has not always been the case. Lorrie Shepard has pointed out that in previous volumes of the *Handbook of Research on Teaching*, there was no specific chapter of classroom-based assessment. Preservice teachers in traditional courses on educational measurement learned about deciles, test item formats, and the use of the bell curve to understand the distribution of test scores. These concepts served the needs of the psychometrician seeking to understand the results of large-scale external assessments but were of little use for the classroom teacher. Likewise, few connections were made in courses on methods of teaching to the role of assessment. As a result, many high school teachers subscribe to the “teach, test, and hope for the best” school of assessment in which tests are created by the teacher at the end of a unit. These tests tend to emphasize low-level knowledge and function as a means of evaluation and the assignment of grades.

This approach to assessment is consistent with a view of learning that was prominent throughout most of the 20th century. An article on learning in the 1960 edition of the *Encyclopedia of Educational Research* emphasized behaviorism as the dominant conception of how learning took place. For the behaviorist, learning is seen as the accumulation of stimulus-response associations and the learner is seen as more or less passive. Things are done to the learner and the results are evaluated through the examination of test data. Testing, often identified as “scientific measurement,” was performed after instruction in order to evaluate its effectiveness.

At present constructivism has replaced behaviorism as the dominant conception of the process of learning, at least in the conceptual frameworks of most educational psychologists. Constructivism emphasizes the active role of the learner in the process of building understanding and acknowledges the importance of both the learner’s background and the social environment in which the learning occurs. Ernst von Glasersfeld stated “Knowledge is not passively received either through the senses or by way of communication. Knowledge is actively built up by the cognizing subject.” In this constructive process the learner is constantly interacting with the perceived environment in which the learning takes place. Feedback that alerts the learner as to the success of his or her learning keeps the learner on a more direct route to the learning goal. Thus, while testing served as a periodic evaluation of the degree of progress made, assessment addresses the learner’s need for more frequent interaction with the environment, guiding the active learner to make judgments about his or her own learning. Assessment, as opposed to testing and evaluation, has assumed a more important role in the processes of teaching and learning.

The culture of school has a great deal of momentum and changes very slowly. The “teach, test, and hope for the best” approach in which evaluation is emphasized and where assessment is mostly confined to quizzes and end-of-chapter or unit tests is still the norm. That culture is shifting, however, as may be inferred from the attention given to assessment at educational conferences and in the discipline-specific journals used by teachers. As this change takes hold, other parts of the curriculum puzzle are shifting in response. In a recent book that has received a good deal of attention, Wiggins and McTighe proposed the “backward” model for curriculum design. Typical curriculum design begins with the

determination of learning targets, proceeds to specification of the instructional activities and confines assessment to a test. The purpose of the test is generally to evaluate the learning and to serve the need to rank order the students at the end of the unit. Backward design also begins with the learning targets but then proceeds directly to the assessment. The question is “What would a successful student know, be able to do, etc.?” Once this question has been answered and the appropriate assessment has been determined the instructional activities are designed with these ends in mind. Assessment shifts from an afterthought to a driver in the teaching process. Along the same lines, teachers are gradually coming to realize that assessment can be used more flexibly in order to serve the day-to-day needs of students and teachers.

It has been argued that the current drive to implement an ever-expanding battery of standardized tests has been detrimental to this evolution of teachers’ conception of assessment. If assessment is closely identified with tests imposed by external authorities, and used to judge teachers as well as students, attention to the development of a more productive understanding of classroom-based assessment may suffer.

It is important to understand some of the terminology used in the field of classroom-based assessment. Assessment may be classed as formative or summative, informal or formal, and authentic or decontextualized. First, formative assessment is that which serves the purpose of modifying instruction. A teacher who gives a pop quiz in order to find out whether students have grasped the highlights of an interactive discussion or who, near the end of class, asks students to write a paragraph summarizing what they know and what they still wonder about the subject of the day’s lesson may be engaged in formative assessment. The results of the assessment will be used to make decisions about pedagogical next steps. Summative assessment is more akin to evaluation in that the results of the learning process are being summed up. The purpose of summative assessment is to measure the degree to which students have achieved the learning objectives. The test at the end of the chapter and the final exam are examples of summative assessments. Of course summative assessments may yield information that can be used for formative purposes. The difference between the two is primarily a matter of the intent of the assessor.

Assessment can also be identified as either formal or informal. Formal assessment is characterized by the fact that there is a cessation of instruction in order to accomplish the assessment. There is an hour set aside on Friday for the unit test. Learning stops, and it’s time to find out what was learned. Formal assessment is often summative. Informal assessment more often takes place as part of the learning process. The teacher, in order to give the students a chance to draw together their understanding of the process, may ask students working in a small group to explain their reasoning. As may be inferred from these examples, formal evaluation is often though not necessarily summative while informal assessment is more often formative.

Authentic assessment differs from decontextualized assessment in that the tasks used in an authentic assessment are more like those that would occur in the context the learning is meant to serve. For example, if a teacher wants to use authentic assessment to find out whether students understand division of two-digit numbers, she might observe students in a setting where division will enable students to solve a perceived problem. The decontextualized version of this process is, as the name implies, one in which the context has been stripped from the task. Students may be presented with a set of two-digit numbers and asked to find their quotients. The information obtained in these two settings

is quite different. Good teachers use these techniques according to the assessment needs of their students.

The process of assessment can take many forms. The following sequence of steps is illustrative of the general pattern. The first step is the determination of the desired outcomes or learning targets. Learning targets are statements about what students must know and understand, about skills they must develop, and about attitudes and inclinations that are important in the area under study and that are to be cultivated in students. The teacher must have a clear understanding of these targets and must be able to convey them to the students and, sometimes, to external stakeholders such as parents, principals, and colleagues. The next step is the specification of evidence. Teachers must be able to describe student actions that will convince the teacher that the learning target has been achieved. The required evidence may be as simple as a specified score on a multiple choice test, or it may be an extended description of actions to be observed in a performance or a written report. Evidence may be expressed in the form of an assessment rubric or scoring guide that specifies evaluative criteria, quality definitions, and a scoring strategy. Having devised learning targets and specified the desired evidence, the teacher must give the students a chance to provide that evidence. This third step is the design and administration of the assessment itself. An assessment may be formal and summative as with a term paper or an oral exam scored according to specified criteria (evidence), or it may be informal and formative as with a class discussion that gives the teacher a clearer picture of the group's abilities and inclinations and provides direction for tomorrow's activities. Regardless of the exact nature of the assessment, the outcome is information about the degree to which students have met the learning targets. The final step is the interpretation of these data and the determination of subsequent action to be taken.

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